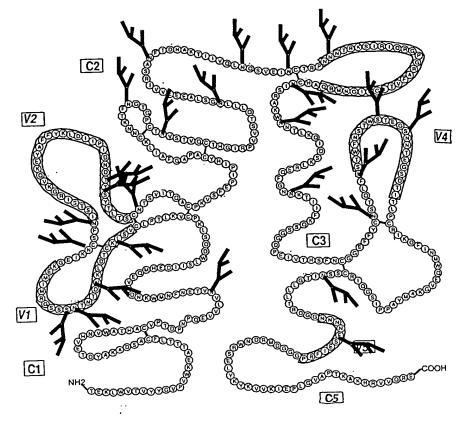


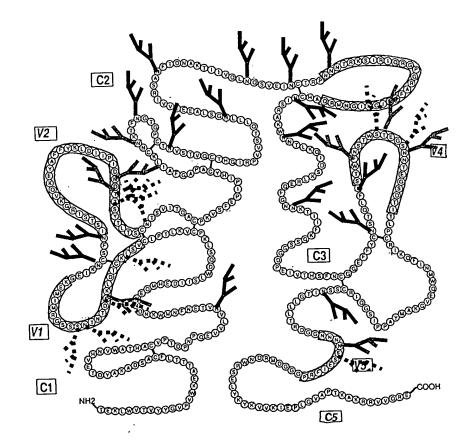
X82

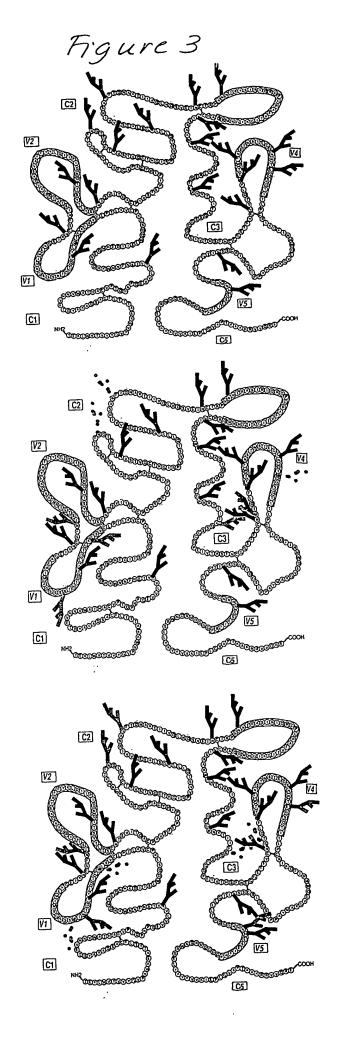
Figure Z

Clade B NSI



Clade B SI





Early

• 21 original sites

Mid

- 5 sites are added
- 3 are removed

Late

- 4 sites are added
- Of the 5 sites added on the mid virus, 4 are now removed

A141 alignment of V1/V2

| SF162 A141-35-1 A141-35-2 A141-35-3 A141-35-4 A141-35-10 A141-35-11 A141-35-12 A141-35-13 A141-35-14 | CVTLHCTNLK NATNTKSSN- WKEMDRGEIK NCSFKVTTSI RNKMQKEYAL FYKLDVVPID NDNTSYKL INC |
|---|---|
| SF162 | CVTLHCTNLK NATNTKSSN- WKEMDRGEIK NCSFKVTTSI RNKMQKEYAL FYKLDVVPID NDNTSYKL INC |
| A141-56-1 A141-56-2 | |
| A141-56-3 | D. |
| A141-56-4 | |
| A141-56-5 | |
| A141-56-10 A141-56-11 | |
| A141-56-11 | DN |
| A141-56-13 | |
| A141-56-14 | []T [[|
| | CVTLHCTNLK MATNTKSSN- WKEMDRGEIK NCSFKVTTSI RNKMOKEYAL FYKLDVVPID NDNTSYKL INC |
| SF162 A141-84-1 | [M]D.R [N]S. EGKVE [NII D.V |
| A141-84-2 | |
| A141-84-3 | N.D.RN.S. EGKVED.V |
| A141-84-4 | N T N EGKVE N D.V D.V TS.R. S. |
| A141-84-5 A141-84-6 | ND.R N.S. EGRVE Nt |
| A141-84-7 | |
| A141-84-8 | N .D.R . N .S.EGKVE . N D.V |
| A141-84-9 | ND.RN.S. EGKVED.VTS.RS. |
| SF162 | CVTLHCTNLK MATNIKSSN- WKEMDRGEIK MCSFKVTTSI RNKMQKEYAL FYKLDVVPID NUMTSYKL INC |
| A141-117-1 | ND.R |
| A141-117-2 A141-117-3 | N. D.R N. S. EGK.E NI D.V D.V TS.R. S. |
| A141-117-4 | N.D.RN.S.EGK.ENID.VTS.R.SN.D.RNS.EGK.ENID.VTS.R.S. |
| A141-117-5 | ND.RN.S. EGKVE |
| A141-117-6 | |
| A141-117-7 A141-117-8 | N.D.RN.S.EGK.ENID.VTS.R.SN.D.RNI.S.EGK.ENI.D.VTS.R.S. |
| A141-117-8 A141-117-9 | Bi. D.R Bi. 3. EGR. E Bi. 3. EGR. E |
| A141-117-10 | |
| A141-117-11 | LS.KD D N. SG RMI.EK NISD.V RS. |
| A141-117-12 | |
| A141-117-13 A141-117-14 | |
| A141-11/-14 | |
| SF162 | CVTLHCTNLK NATNTKSSN- WKEMDRGEIK NCSFKVTTSI RNKMQKEYAL FYKLDVVPID NDNTSYKL INC |
| A141-215-1 | D |
| A141-215-2 | |
| A141-215-3 | DN |
| A141-215-5 A141-215-12 | |
| A141-215-13 | 3 |
| A141-215-14 | 1 |
| A141-215-15 | 5 |

A141 alignment of V4

| SF162 A141-35-1 A141-35-2 A141-35-3 A141-35-4 A141-35-10 A141-35-11 A141-35-12 A141-35-13 | CNSTQLFN | STWNN- | TIGENNT NGTITLPC |
|--|-------------|---|--|
| SF162 A141-56-1 A141-56-2 A141-56-3 A141-56-4 A141-56-5 A141-56-10 A141-56-11 A141-56-12 A141-56-13 A141-56-14 | CNSTQLFN | STWNN- | TIGHNT NGTITLPC |
| SF162 A141-84-1 A141-84-2 A141-84-3 A141-84-4 A141-84-5 A141-84-6 A141-84-7 A141-84-8 A141-84-9 | ST ST ST ST | WMFND. WMFND. WMFND. WMFND. WMFND. WMFND. | TIGHNT NGTITLPC KES.D.E.N. KES.D.E.N. KES.D.E.N. KES.D.E.N. |
| A141-117-8 A141-117-9 A141-117-10 | ST ST ST ST | WMFND. WMFND. WMFND. WMFND. WMFND. WMFND. F.S | TWS.E.S. E.SD. KES.D. E. N. TWS.E.S. E.SD. |
| SF162 A141-215-1 A141-215-2 A141-215-3 A141-215-5 | CNSTQLFN | STWNN- | TIGENNT NGTITLPC |